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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------|------------------|
| 10/725,938 | 12/03/2003 | Holger Hoppe | 543822002400 | 4491 |
| 25227 | 7590 | 01/19/2006 | | EXAMINER |
| MORRISON & FOERSTER LLP 1650 TYSONS BOULEVARD SUITE 300 MCLEAN, VA 22102 | | | KOBERT, RUSSELL MARC | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2829 | |

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/725,938 | HOPPE, HOLGER | |
| | Examiner | Art Unit | |
| | Russell M. Kobert | 2829 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 30 December 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-22 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1205</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohba (6323666) in view of Van Loan et al (5247246).

Ohba describes a testing method for testing contacting between a semiconductor device and a carrier, comprising loading the carrier with the semiconductor device, such that contacting between the carrier and the semiconductor device is tested immediately

after the loading of the carrier with the semiconductor device (col 4, ln 38-47, 63-67); as recited in claim 1.

As to claim 2, connecting the carrier to a testing apparatus is anticipated by Ohba (col 2, ln 6-10).

As to claim 3, having the carrier is connected to the testing apparatus and the carrier subsequently loaded with the semiconductor device is considered an inherent function within the operable scope of Ohba.

As to claim 4, Ohba anticipates the carrier being loaded at a carrier loading station and contacting between the carrier and the semiconductor device is tested before the carrier is transported to a further station (see SUMMARY OF THE INVENTION).

As to claim 5, having the contacting between the carrier and the semiconductor device tested by the testing apparatus is considered an inherent function within the operable scope of Ohba.

As to claim 6, the testing apparatus being configured such that it tests the contacting between the carrier and the semiconductor device without functioning of the semiconductor device is considered an inherent function within the operable scope of Ohba (col 3, ln 6-10).

As to claim 7, performing the contacting between the carrier and the semiconductor device being tested within 2 seconds after loading of the carrier with the semiconductor device is considered an inherent function within the operable ranges of Ohba.

As to claim 12, Ohba describes a testing system for testing contacting between a semiconductor device and a carrier, comprising a testing apparatus to which a carrier can be connected, and which is configured such that contacting between the carrier and the semiconductor device is tested by the testing device immediately after loading of the carrier with a semiconductor device (col 4, ln 38-47, 63-67).

As to claim 13, having the test apparatus performing the test after a signal is output by a loading device, the signal indicating that the carrier was loaded with the semiconductor device is considered an inherent part of the operation of Ohba (col 4, ln 19-42).

As to claim 14, the test system further comprising a testing apparatus, the testing apparatus being configured such that contacting between the carrier and the semiconductor device is tested immediately after loading of the carrier with the semiconductor device is anticipated by Ohba (col 4, ln 38-47, 63-67).

Although Ohba does not specifically describe the semiconductor device comprises one or more contacting test contacts for exclusively testing the contacting between the semiconductor device and the carrier according to claims 1 and 12, Van Loan et al shows (Figures 25-27) a semiconductor device (190) comprises one or more contacts (204) for exclusively testing the contacting between the semiconductor device and the carrier (208).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have combined the teaching of Van Loan et al with that of Ohba to make the claimed invention because Van Loan et al teach that a test unit can be

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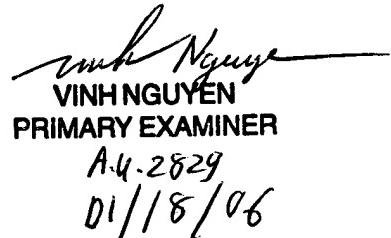
integrated circuit chip carrier or package to permit more readily accessible access to testing electrical conductivity between leads of the package to individual conductors on a printed circuit board. Moreover Van Loan et al teach that having easier access through test contacts improves throughput in a production environment. Moreover, the limitations of claims 8-11 and 15-22 are considered inherent in the above combination or within the normal range of operating the apparatus of the above combination.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kobert whose telephone number is (571) 272-1963.

For an automated menu of Tech Center 2800 phone numbers call (571) 272-2800.



Russell M. Kobert
Patent Examiner
Group Art Unit 2829
August 22, 2005



VINH NGUYEN
PRIMARY EXAMINER
A.U.2829
01/18/06